

Title (en)
Integrated semiconductor structure

Title (de)
Integrierte Halbleiterstruktur

Title (fr)
Structure semi-conductrice intégrée

Publication
EP 1172848 A1 20020116 (EN)

Application
EP 00830492 A 20000714

Priority
EP 00830492 A 20000714

Abstract (en)
Integrated structure 100 in a chip of semiconductor material comprising a substrate 101 having a first type of conductivity and an epitaxial layer 102 grown on said substrate and having a conductivity of the first type less than the conductivity of the substrate. Moreover, the integrated structure comprises a first region 104 and a second region 105 included in the epitaxial layer and having a conductivity opposite to that of the layer, said first and said second regions extending from a surface 103' of the epitaxial layer opposite the substrate into the layer so as to form a first and a second junction with said layer, and means for reducing an injection of current through the layer from said first to said second region when the first junction is directly biased. The integrated structure is characterized by the fact that said means comprise an isolating element 107 located between said first and second regions and extending from said surface of the epitaxial layer substantially at least as far as the substrate. <IMAGE>

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H01L 21/762; **H01L 21/822**; **H01L 27/02**

IPC 8 full level
H01L 21/762 (2006.01); **H01L 21/822** (2006.01); **H01L 27/02** (2006.01)

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H01L 21/762 (2013.01 - EP US); **H01L 21/822** (2013.01 - EP US); **H01L 27/0248** (2013.01 - EP US); **H01L 29/7816** (2013.01 - EP US)

Citation (search report)

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- [A] PATENT ABSTRACTS OF JAPAN vol. 013, no. 126 (E - 734) 28 March 1989 (1989-03-28)

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